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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,672	11/20/2003	Gaku Harada	8013-1155-1	7405

466 7590 11/01/2007
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EXAMINER

LEE, CYNTHIA K

ART UNIT	PAPER NUMBER
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1795

MAIL DATE	DELIVERY MODE
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11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/716,672

Applicant(s)

HARADA ET AL.

Examiner

Cynthia Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This Office Action is responsive to the amendment filed on 8/28/2007. Claims 2 and 3 have been canceled. Claims 1 and 4-18 are pending. Applicant's arguments have been fully considered and are not persuasive. However, the instant claims are rejected under new grounds of rejections. Claims 1 and 4-18 are finally rejected for reasons of record and for reasons necessitated by applicant's amendment.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

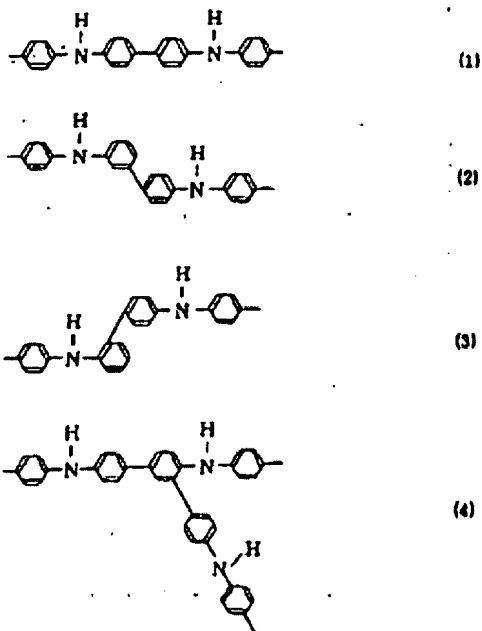
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,4-6,11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirai et al. (JP 61-206170).

With respect to claims 1,6,11-13,15, Hirai et al. teach the polymerization or copolymerization of diphenyl amine or triphenyl amine and their derivatives as the electrode material in a battery. The general formulae of the conductive polymer are listed as follows.

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With respect to claims 1,4,5,14, Hirai et al. teach the polymer is doped with perchloric acid (ClO_4^-). See page 353.

Claim Rejections - 35 USC § 103

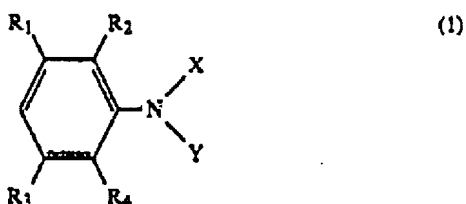
4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,4-6,11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US 4,740,436).

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Kobayashi et al. disclose a non-aqueous secondary battery comprising a polymer of aniline derivative as a positive electrode. A monomer of the form



where X and Y independently represent a hydrogen atom or a phenyl group. The polymer is formed as a film and during the polymerization process is doped with acid, such as HCl. See Column 5, Lines 1-25. Furthermore, Kobayashi et al. list diphenylamine as a "typical example" of a monomer of their invention, and teach both homopolymers and copolymers are encompassed by their disclosure. Thus, one of ordinary skill in the art would recognize poly(diphenylamine) as one of a relatively small number of polymers intended to be encompassed by the Kobayashi et al. invention. Kobayashi et al. suggest that the polymers of their invention should be complexed (doped) with a protonic acid. Preferred anions of the protonic acid used for the complexing are Cl⁻, BF₄⁻ and ClO₄⁻. Thus, Kobayashi et al. teach doping or complexing polybiphenylamine.

6. Claims 7,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai et al. (JP 61-206170) as applied to claims 1, 4-6,11-15 and, further in view of Pienimaa et al. (US 6,110,563).

Hirai et al. disclose a conductive polymer as described above in paragraph 3. However, Hirai et al. do not teach the conductive polymer can be used as an

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electromagnetic shielding material. Pienimaa et al. teach an electromagnetic shielding is prepared using a conductive polymer such as polyaniline. See Column 2, Lines 1-5. Therefore, it would have been obvious to one of ordinary skill in the art to use polybiphenylaniline polymer as the electromagnetic shielding material, because Pienimaa et al. teach the use of a conductive polymer film as the EMI shielding material.

7. Claims 9,10,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai et al. (JP 61-206170) as applied to claims 1, 4-6,11-15 and, further in view of Kathirgamanathan et al. (US 4,992,559).

Hirai et al. disclose a conductive polymer as described above in paragraph 3. However, Hirai et al. do not teach the conductive polymer can be used as in other devices. Kathirgamanathan et al. teach an the electroconductive polymer can have many uses, including EMI/RF shielding material, in electrochromic display systems, ant-static material, as ion and pH sensors and as battery electrode material. See Abstract. Therefore, it would have been obvious to one of ordinary skill in the art to use polybiphenylaniline polymer as the conductive polymer in various devices, because one of ordinary skill in the art would recognize that conductive polymer can be used in various applications as stated in the Kathirgamanathan reference.

8. Claims 7,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US 4,740,436) as applied to claims 1,4-6,11-15 and, further in view of Pienimaa et al. (US 6,110,563).

Kobayashi et al. disclose a conductive polymer as described above in paragraph 5. However, Kobayashi et al. do not teach the conductive polymer can be used as an electromagnetic shielding material. Pienimaa et al. teach an electromagnetic shielding is prepared using a conductive polymer such as polyaniline. See Column 2, Lines 1-5. Therefore, it would have been obvious to one of ordinary skill in the art to use polybiphenylaniline polymer as the electromagnetic shielding material, because Pienimaa et al. teach the use of a conductive polymer film as the EMI shielding material.

9. Claims 9,10,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US 4,740,436) as applied to claims 1,4-6,11-15 and, further in view of Kathirgamanathan et al. (US 4,992,559).

Kobayashi et al. disclose a conductive polymer as described above in paragraph 5. However, Kobayashi et al. do not teach the conductive polymer can be used as in other devices. Kathirgamanathan et al. teach an the electroconductive polymer can have many uses, including EMI/RF shielding material, in electrochromic display systems, ant-static material, as ion and pH sensors and as battery electrode material. See Abstract. Therefore, it would have been obvious to one of ordinary skill in the art to use polybiphenylaniline polymer as the conductive polymer in various devices, because one of ordinary skill in the art would recognize that conductive polymer can be used in various applications as stated in the Kathirgamanathan reference.

Response to Arguments

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Applicant's arguments filed 8/28/2007 have been fully considered but they are not persuasive.

Applicant asserts that Hirai fails to teach a polybiphenylaniline of the claimed formula. The Examiner remains unpersuaded. The Abstract indicates that amine polymer indicated in the formula are used as an electrode material, and the Examiner notes that aniline as instantly claimed is an aryl amine. Refer to fig. 1-4 is Hirai.

Regarding the Applicant's arguments on the reliance of solely the abstract of Hirai, MPEP 2128 states that

An electronic publication, like any publication, may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See MPEP § 2121.01 and § 2123. Note, however, that if an electronic document which is the abstract of a patent or printed publication is relied upon in a rejection under 35 U.S.C. 102 or 103, only the text of the abstract (and not the underlying document) may be relied upon to support the rejection. In situations where the electronic version and the published paper version of the same or a corresponding patent or printed publication differ appreciably, each may need to be cited and relied upon as independent references based on what they disclose. (emphasis added)

Further, MPEP 706.02 states that

In limited circumstances, it may be appropriate for the examiner to make a rejection in a non-final Office action based in whole or in part on the abstract only without relying on the full text document. (emphasis added)

Nowhere does the MPEP state that the Examiner is required to submit a translation of the full document for the Applicant to consider in order to reply to the rejections stated in the Office Action.

Further, the Examiner disagrees that the Applicant had not been given an opportunity to fully respond to the Office Action because the document Hirai was cited by the Applicant on an Information Disclosure Statement submitted on 11/20/2003. The

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Examiner concludes that the Applicant had knowledge of the content of the JP document Hirai before submitting the IDS. It is unclear to the Examiner as to why the Applicants did not know the content of the JP document particularly when the Applicants claim foreign priority to an application in the same language.

Applicant asserts that the data of Hirai is not identified. The Examiner notes that the data in Hirai are not being relied upon for the rejection above.

Applicant asserts that Kobayashi discloses diphenylamine, but not polybiphenylaniline (emphasis in original). Kobayashi discloses that a polymer of aniline is used. See abstract and 2:30.

Applicant asserts that Kobayashi fails to recognize the superior results obtained by a polymer based on biphenylaniline that is doped with a dopant as claimed.

However, findings of an additional advantage associated with doing what the prior art suggests does not lend patentability to an otherwise unpatentable invention. See *In re Linter*, 458, F.2d 1013, 173 USPQ 560 (CCPA 1972) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990). See MPEP 2145. Further, the fact that applicant has recognized another advantage which would flow naturally from the following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Lee whose telephone number is 571-272-8699. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Susy Tsang-Foster can be reached on 571-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ckl


SUSY TSANG-FOSTER
PRIMARY EXAMINER